

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

IMPULSE TECHNOLOGY LTD.,

Plaintiff,

v.

MICROSOFT CORPORATION;  
ELECTRONIC ARTS, INC.; UBISOFT,  
INC.; THQ INC.; KONAMI DIGITAL  
ENTERTAINMENT INC.,

Defendants.

Civil Action No. 11-586-RGA-CJB

**REPORT AND RECOMMENDATION**

On January 17, 2014, Defendants Microsoft Corporation, Electronic Arts, Inc. ("EA"), and Ubisoft, Inc. ("Ubisoft") (collectively, "Defendants") filed a Motion for Partial Summary Judgment of Noninfringement and No Willful Infringement ("Motion for Summary Judgment of Noninfringement" or "Motion") as to United States Patent Nos. 6,308,565 (the "565 patent"), 6,765,726 (the "726 patent"), 6,876,496 (the "496 patent"), 7,359,121 (the "121 patent"), 7,791,808 (the "808 patent"), and 6,430,997 (the "997 patent"). (D.I. 332; D.I. 333 at 1-4) On March 27, 2015, the Court issued a Report and Recommendation regarding that Motion, recommending that the District Court grant summary judgment of non-infringement in Defendants' favor as to 14 of 15 asserted claims in the case. (D.I. 409) Remaining to be resolved is Defendant Ubisoft's argument that summary judgment should be granted to it on the ground that it does not infringe the remaining asserted claim in the case: claim 11 of the '997 patent. (D.I. 333 at 37-38; D.I. 410) The instant Report and Recommendation addresses that issue, as well as Ubisoft's assertion that summary judgment should be granted in its favor on the ground that any infringement of claim 11 of the '997 patent was not willful as a matter of law.

(D.I. 333 at 38-40) The Court recommends that the Motion be DENIED as to non-infringement of claim 11 of the '997 patent by Ubisoft, but that it be GRANTED as to no willful infringement regarding claim 11.

## **I. BACKGROUND**

The Court incorporates by reference the factual background set forth in its prior Report and Recommendation. (D.I. 409 at 2-4) To the extent further facts of record are relevant to the instant Report and Recommendation, they are otherwise set forth herein.

## **II. STANDARD OF REVIEW**

In reviewing the Motion as it relates to these remaining issues, the Court utilizes the familiar summary judgment standards set forth in Federal Rule of Civil Procedure 56 and in the jurisprudence of the Supreme Court of the United States. Those standards were described in the Court's prior Report and Recommendation, (*id.* at 4-6), and the Court applies them again to the issues raised below.

## **III. DISCUSSION**

### **A. Non-infringement of Claim 11 of the '997 Patent**

#### **1. Legal Standard Regarding Infringement**

The standard for patent infringement is set forth in 35 U.S.C. § 271, which states that “whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.” An infringement analysis is performed on a claim-by-claim basis. *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1351 (Fed. Cir. 2001). In order to prove infringement, “the patentee must show that an accused product embodies all

limitations of the claim either literally or by the doctrine of equivalents.” *Cephalon, Inc. v. Watson Pharm., Inc.*, 707 F.3d 1330, 1340 (Fed. Cir. 2013).

To literally infringe the claim, an accused device must embody each limitation of the claim; the absence of any limitation defeats literal infringement. *Research Plastics, Inc. v. Fed. Packaging Corp.*, 421 F.3d 1290, 1297 (Fed. Cir. 2005). To prove infringement under the doctrine of equivalents, “a patentee must provide particularized testimony and linking argument with respect to the ‘function, way, result’ test.” *Cephalon*, 707 F.3d at 1340 (noting that the essential inquiry in any such determination is whether “the accused product or process contain[s] elements identical or equivalent to each claimed element of the patented invention”) (internal quotation marks and citation omitted). The function-way-result test “asks whether an element of an accused product performs substantially the same function in substantially the same way to obtain the same result as an element of the patented invention.” *Id.* (internal quotation marks and citation omitted).<sup>1</sup>

## **2. Discussion**

Ubisoft’s non-infringement argument here focuses on the claim term “training sequence” used in claims 5 and 11 of the '997 patent. (D.I. 333 at 37-38) The term appears in independent claim 5 (to which claim 11 depends), and together, the two claims read as follows:

---

<sup>1</sup> In resolving Ubisoft’s Motion as to claim 11 below, the Court is required to construe a claim term. In doing so, the Court turns for guidance to precedent from the Supreme Court and the United States Court of Appeals for the Federal Circuit regarding claim construction, previously set out in the Court’s May 13, 2013 Report and Recommendation regarding claim construction. *See Impulse Tech. Ltd. v. Microsoft Corp.*, C.A. No. 11-586-RGA-CJB, 2013 WL 2020055, at \*2-4 (D. Del. May 13, 2013).

5. A reactive power training system comprising:  
a reactive training device which provides cues to elicit responsive changes in an overall physical location of a subject in at least two dimensions; and  
a resistive training device;  
wherein the reactive training device and the resistive training device are used in a *training sequence*.

...

11. The system of claim 5, wherein the reactive training device includes positional tracking of the subject in at least two vectors of movement.

('997 patent, col. 45:1-7, 31-33 (certain emphasis added)) In its briefing, Ubisoft argued that a “‘training sequence’ *requires alternation* between using a reactive training device and a resistive training device[.]” (D.I. 333 at 37 (certain emphasis added and omitted)) And, in turn, it asserted that its accused products (the “Your Shape mini-games”) do not involve such alternation, and therefore cannot meet the “training sequence” claim element.<sup>2</sup> (*Id.* at 37-38; *see* D.I. 400, ex. 1 at 1 (showing that certain Your Shape Fitness Evolved mini-games are the only Ubisoft products accused of infringing claim 11 of the '997 patent))

But, as Plaintiff pointed out in its own briefing, (D.I. 361 at 37), Ubisoft’s argument was problematic, because if accepted, it would render claims 5 and 7 coextensive. (*See* D.I. 361 at 37) Claim 7 of the '997 patent claims “[t]he system of claim 5, wherein the training sequence includes alternating use of the reactive training device with use of the resistive training device.”

---

<sup>2</sup> More specifically, Ubisoft argued that “the accused Your Shape mini-games do not include a ‘training sequence’ in which the player alternates between the alleged reactive training device (which Impulse contends is the Kinect, Xbox 360, and the Your shape mini-game) and the alleged resistive training device (which Impulse alleges are dumbbells or hand weights).” (D.I. 333 at 38) It asserts that “[to] the extent that a user uses weights during a Your Shape game . . . the user would use them *at the same time* and *in reaction to* the Your Shape mini-game.” (*Id.* (certain emphasis omitted))

('997 patent, col. 45:10-12) This is precisely the limitation that (at least in its briefing) Ubisoft sought to import into claim 5, and Ubisoft did not point to any meaningful difference that would remain between claims 5 and 7 if this construction were adopted. (D.I. 386 at 20) The “presence of a dependent claim that adds a particular limitation raises a presumption that the limitation in question is not found in the independent claim.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed. Cir. 2004). That presumption is “especially strong” when “the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim.” *SunRace Roots Enter. Co., Ltd. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003). Ubisoft’s position, which would thus have introduced the limitations of claim 7 into the “training sequence” term of claim 5, would have run directly contrary to the doctrine of claim differentiation.<sup>3</sup>

Realizing this, Ubisoft later threw out its “requires alternation” position and changed the focus of its argument. At oral argument, Ubisoft’s counsel stated that “[w]e’re not talking about alternating” and argued instead that a training “sequence” “can be resistive/resistive, reactive/reactive, resistive/reactive, whatever you want to do, but there needs to be a sequence.”

---

<sup>3</sup> Claim 25 of the '996 patent also contradicts any claim construction that would import an “alternating” requirement into the term “training sequence.” Claim 25 claims a “training sequence” and then separately, within the same claim, includes the limitation “wherein the reactive training bouts are alternated with the resistive training bouts [within the training sequence].” ('997 patent, col. 46:23-34) If the term “training sequence” already required alternating between the two kinds of exercise, there would be no need for the more specific limitation. See *W.L. Gore & Associates, Inc. v. C.R. Bard, Inc.*, No. Civil Action No. 11-515-LPS-CJB, 2014 WL 3950663, at \*9 (D. Del. Aug. 8, 2014) (noting that adopting a party’s proposed claim construction “would render portions of claim 33 redundant, which is disfavored”) (citing cases).

(D.I. 401 at 65) In other words, Ubisoft was now focused on the idea that whatever “training sequence” means, it cannot allow for the simultaneous use of reactive and resistive training devices. (*Id.*)

The Court is not convinced. Ubisoft claims its position is supported by the “the plain and ordinary meaning” of the word “sequence” as used in “training sequence.” (D.I. 401 at 63) But it offers no dictionary definition for “sequence” (or “training sequence,” for that matter). And it is not at all clear to the Court that the plain and ordinary meaning of “training sequence,” as used in the claim, necessarily carries the meaning that Ubisoft suggests. The term, as used in claim 5, could simply be meant to refer to a series of movements or exercises—without regard to whether each individual movement or exercise involved the simultaneous use of a resistive and a reactive training device (or without regard to whether such devices were used in alternating fashion). In other words, claim 5 reads as if it could well mean “wherein the reactive training device and the resistive training device are used in a *series of movements or exercises*.”

The specification seems to bear this out. In one instance, it implies that “training sequence” is synonymous with the term “training scenario[,]” and it uses “sequence” in a manner suggesting general reference to a grouping of movements or exercises (one that is agnostic as to whether reactive and resistive devices are used simultaneously, in alternating fashion or otherwise). (*See* '997 patent, col. 40:33-35 (“[T]he recognition of a particular user may be used to call forth a reactive training scenario or sequence particular to that user.”)) Another portion of the specification also uses “training sequence” in a similar way. (*Id.*, col. 42:7-14 (“For example, the network administration computer may be programmed to send a user to a strength training machine which is currently unused, if the unused machine is part of that user’s training sequence

and has not yet been used by that user in the present training session.”))

In its briefing, Ubisoft offered little intrinsic evidence in support of its position. (D.I. 333 at 37-38) The only portion of the patent specification it cited therein was the following:

During the recommended two to three reactive power training sessions per week, a subject follows a training sequence which *preferably* alternates between 30 to 120 second bouts (periods) of exercise on reactive training devices **602**, and resistive strength enhancing activities on the strength training devices **604**.

(’997 patent, col. 41:48-53 (certain emphasis added))<sup>4</sup> It is not clear that this sentence is intended to refer to the entire invention, however, rather than a single embodiment, and as such its value is limited. *See, e.g., Cadence Pharm. Inc. v. Exela PharmSci Inc.*, No. 2014-1184, — F.3d —, 2015 WL 1284235, at \*3 (Fed. Cir. Mar. 23, 2015) (“[E]ven if all of the embodiments discussed in the patent included a specific limitation, it would not be proper to import from the patent’s written description limitations that are not found in the claims themselves.”) (internal quotation marks and citations omitted). And the use of the term “preferably” does not help Ubisoft’s cause. If the training sequence at issue “preferably” requires alternation of reactive and resistive training devices (or, put in terms of Ubisoft’s updated argument, requires non-simultaneous use of such devices), that would suggest that such alternation or non-simultaneous use is not *absolutely* required as to claim 5 (and thus claim 11).<sup>5</sup>

---

<sup>4</sup> The last sentence of this paragraph in the specification, which Ubisoft’s counsel highlighted at oral argument, (D.I. 401 at 63-64), simply furthers this thought: “It is believed that resistive strength training prepares (fires up) the muscle fibers prior to reactive training to create a state where the neuromuscular system is most receptive to growth.” (’997 patent, col. 41:55-58)

<sup>5</sup> Two other portions of the specification that Ubisoft’s counsel cited at oral argument, (D.I. 401 at 63-65), are similarly equivocal. One portion states that “[f]or example, after a suitably-timed bout of exercise on the reactive training device the user *may* be prompted

In addition to the intrinsic evidence, Ubisoft also cites to testimony from Plaintiff's invalidity expert, Dr. John Grindon, to the effect that he understood the term "sequence" in this claim element to mean that "the reactive component [is] followed by a resistive component[.]" (D.I. 333 at 37-38 (citing D.I. 336, ex. 9 at 293-94)) It is understandable why Ubisoft looks to score points with this piece of deposition testimony. But the Federal Circuit has made clear that "conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court[.]" and are to be afforded less weight in a claim construction analysis than are citations to the intrinsic record. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1318 (Fed. Cir. 2005) ("[A] court should discount any expert testimony 'that is clearly at odds with the claim construction mandated by the claims themselves [and] the written description. . . .'"); *see also SkinMedica, Inc. v. Histogen Inc.*, 727 F.3d 1187, 1210 (Fed. Cir. 2013) (affording expert testimony "no weight" with regard to claim construction where it was "conclusory and incomplete[,]" lack[ed] any substantive explanation tied to the intrinsic record[,]" and . . . appear[ed] to conflict with the plain language of the written description"). In this case, Dr. Grindon's testimony consisted of a short series of answers given in a deposition, without any follow-up discussion regarding the

---

to proceed to a specific strength training device." (997 patent, col. 42:1-3 (emphasis added)) The use of "[f]or example" and "may" makes clear that this language is not meant to limit the invention to one in which reactive and resistive devices are required to be used in an alternating sequence (or in non-simultaneous fashion). The second cited portion of the specification states that "[p]referably the bouts of reactive training are sufficiently strenuous to maintain the user's heart rate in the target zone during the resistive strength training that occurs between bouts of reactive training." (997 patent, col. 42:20-23) This sentence certainly is intended to and does describe the benefits of using resistive and reactive training in an alternating series. But what the sentence (or the paragraph in which it falls) does *not* clearly do is discuss what a "training sequence" or "sequence" is (as those terms are used in the claims). In other words, it does not clearly state that the invention as a whole or claims 5 and 11 exclude, for example, the use of resistive and reactive training devices simultaneously. (997 patent, col. 42:20-23)



bases or reasoning behind the answers. As such, it carries little weight in the claim construction analysis.

In light of the intrinsic evidence, the Court recommends that “training sequence” be construed to require only a series of movements or exercises, without regard to whether resistive or reactive training devices are used simultaneously, alternatively, or otherwise. And because Ubisoft’s argument in favor of summary judgment here was solely premised on an understanding of the claim term that would require alternating between those devices (or at least the non-simultaneous use of such devices), the Court recommends that Ubisoft’s motion be denied. Material issues of fact remain as to whether Ubisoft’s accused products infringe claim 11 of the '997 patent.

#### **B. Willful Infringement**

In its motion, Ubisoft further argues that, based on the strength of its non-infringement and invalidity positions, it is entitled to summary judgment that it cannot be found to have willfully infringed claim 11 of the '997 patent as a matter of law. (D.I. 333 at 38-40) In *In re Seagate Tech., LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007), the Federal Circuit has set out a two-part test for willfulness, consisting of objective and subjective prongs:

[T]o establish willful infringement, a patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent. . . . The state of mind of the accused infringer is not relevant to this objective inquiry. If this threshold objective standard is satisfied, the patentee must also demonstrate that this objectively-defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to the accused infringer.

*In re Seagate Tech., LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (en banc) (internal citation

omitted); see *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 682 F.3d 1003, 1007-08 (Fed. Cir. 2012) (describing the *Seagate* test set as including “objective” and “subjective” prongs). “While the ultimate question of willfulness based on an assessment of the second prong of *Seagate* may be a question of fact[,]” the objective prong involves a legal determination and “should always be decided as a matter of law by the judge.” *Bard*, 682 F.3d at 1006-08. “Objective recklessness will not be found where the accused infringer has raised a ‘substantial question’ as to the validity or noninfringement of the patent.” *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 776 F.3d 837, 844 (Fed. Cir. 2015) (internal citations omitted).

The Court concludes that the non-infringement argument that Ubisoft presented is not sufficient, on its own, to preclude a determination of willful infringement. Ubisoft’s non-infringement argument relies upon a proposed construction of a claim term that has insufficient support in the specification (and, at least as to Ubisoft’s prior argument that the claim term requires alternation, would run directly contrary to the doctrine of claim differentiation). See *Formax, Inc. v. Alkar-Rapidpak-MP Equip., Inc.*, No. 11-C-298, 2014 WL 2894898, at \*2, \*6 (E.D. Wis. June 26, 2014) (denying motion for summary judgment of no willful infringement where the defendant presented a “weak” or “run-of-the-mill limiting argument” regarding claim construction); *Saint-Gobain Autover USA, Inc. v. Xinyi Glass N. Am., Inc.*, 707 F. Supp. 2d 737, 748 (N.D. Ohio 2010), *as corrected* (Apr. 13, 2010) (denying judgment as a matter of law with regard no willful infringement, and stating that “[b]ecause the Court would have had to contravene a cardinal principle of claim construction to adopt [Defendant’s] construction, namely to import limitations not found in the claims, the Court cannot find that [Defendant’s] position was reasonable”); cf. *Tarkus Imaging, Inc. v. Adobe Sys., Inc.*, 867 F. Supp. 2d 534, 537 (D. Del.

2012) (granting summary judgment of no willful infringement where “the proper claim construction was a sufficiently close question to foreclose a finding of wilfulness.”) (quoting *Cohesive Techs., Inc. v. Waters Corp.*, 543 F.3d 1351, 1374 n.4 (Fed. Cir. 2008)).

With regard to Ubisoft’s invalidity defense as to claim 11, the Court has previously determined that issues of fact (regarding objective considerations of non-obviousness) remain that, in the end, preclude a recommendation that summary judgment be granted. (D.I. 409 at 38-39) Yet in analyzing that defense in significant detail, (*id.* at 24-39), the Court made clear that many aspects of Ubisoft’s arguments were well-taken, and that the decision as to whether to recommend a grant of summary judgment was a close one, (*id.* at 38). In light of the relative strength of that invalidity defense, the Court is persuaded that as to claim 11, Plaintiff cannot demonstrate that Ubisoft acted despite an objectively high likelihood that its actions constituted infringement of a valid patent claim. *See, e.g., Robocast, Inc. v. Microsoft Corp.*, 21 F. Supp. 3d 320, 336 (D. Del. 2014) (granting summary judgment of no willfulness where, *inter alia*, the defendant’s defenses were “reasonable”); *Intellectual Ventures I LLC v. Xilinx, Inc.*, C.A. No. 10-1065-LPS, 2014 WL 1573542, at \*3-4 (D. Del. Apr. 21, 2014) (same); *Masimo Corp. v. Philips Electronics N. Am. Corp.*, C.A. No. 09-80-LPS-MPT, 2013 WL 2920478, at \*7 (D. Del. June 14, 2013) (granting summary judgment of no willful infringement where the defendant “presented legitimate and credible defenses”).<sup>6</sup>

#### IV. CONCLUSION

---

<sup>6</sup> To the extent that Defendant EA also seeks summary judgment of no willful infringement as to claim 11, the Court recommends that EA’s motion be granted as well, for the same reasons. (*See* D.I. 400, ex. 1 at 1 (listing claim 11 of the '997 patent as being asserted against EA))

For the reasons set forth above, the Court recommends that Defendants' Motion for Summary Judgment of Noninfringement be DENIED as to non-infringement of claim 11 of the '997 patent by Ubisoft, but that it be GRANTED as to no willful infringement regarding claim 11.

This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), Fed. R. Civ. P. 72(b)(1) and D. Del. LR 72.1. The parties may serve and file specific written objections within fourteen (14) days after being served with a copy of this Report and Recommendation. Fed. R. Civ. P. 72(b). The failure of a party to object to legal conclusions may result in the loss of the right to de novo review in the district court. *See Sincavage v. Barnhart*, 171 F. App'x 924, 925 n.1 (3d Cir. 2006); *Henderson v. Carlson*, 812 F.2d 874, 878-79 (3d Cir. 1987).

The parties are directed to the Court's Standing Order for Objections Filed Under Fed. R. Civ. P. 72, dated October 9, 2013, a copy of which is available on the District Court's website, located at <http://www.ded.uscourts.gov>.

Dated: April 9, 2015

  
\_\_\_\_\_  
Christopher J. Burke  
UNITED STATES MAGISTRATE JUDGE